

CLAIMS

1. A method for preparing a glycoside in which at least two phenolic hydroxyl groups of a compound having at least two phenolic hydroxyl groups in its molecule are glycosidically linked to anomeric carbon atoms of at least two sugar molecules, the method comprising the step of: allowing a compound having at least two phenolic hydroxyl groups in its molecule to react with sugar molecules each having an acetylated hydroxyl group attached to an anomeric carbon atom in the presence of an organic solvent and an acid catalyst while removing acetic acid formed during the reaction from the reaction system.

2. The method for preparing a glycoside according to Claim 1, wherein the compound having at least two phenolic hydroxyl groups is represented by formula (1):

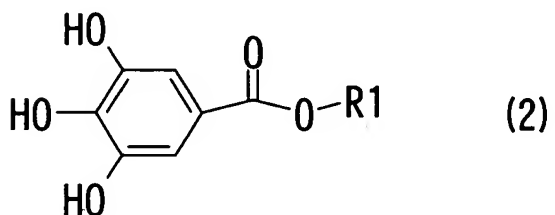


(1)

wherein R^1 represents hydrogen, C_1-C_{18} straight or branched alkyl or alkenyl, C_1-C_{18} acyl, or optionally substituted benzyl; R^2 represents hydrogen, optionally substituted C_1-C_{18}

straight or branched alkyl or alkenyl, $-(C=O)-R_3-R_4$ (wherein R_3 represents C_1-C_{18} straight or branched alkylene or alkenyl, R_4 optionally substituted phenyl), $-R_3-(C=O)R_4$ (wherein R_3 represents C_1-C_{18} straight or branched alkylene or alkenyl, R_4 optionally substituted phenyl), optionally substituted amino, optionally substituted phenyl, $-O-R_5$, $-S-R_5$, $-S-S-R_5$, $-NH-R_5$, $-SO_2-R_5$, $-CONH-R_5$, $-NHCO-R_5$, $-COO-R_5$, $-OCO-R_5$, $-OCONH-R_5$, $-NHCOO-R_5$, $-NHCONH-R_5$, $-OCOO-R_5$, $-SO_2NH-R_5$, or $-NHSO_2-R_5$ (wherein R_5 represents optionally substituted phenyl); n is an integer of 2 to 5; m is an integer of 1 to 3.

3. The method for preparing a glycoside according to Claim 1 or 2, wherein the compound having at least two phenolic hydroxyl groups is represented by formula (2):

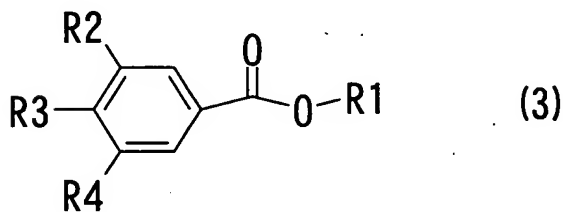


wherein R_1 represents hydrogen, or C_1-C_{10} straight or branched alkyl or alkenyl.

4. The method for preparing a glycoside according to any one of Claims 1 to 3, wherein the sugar molecules each having an acetylated hydroxyl group attached to an anomeric

carbon atom are glucose pentaacetate.

5. The method for preparing a glycoside according to any one of Claims 1 to 4, wherein the compound prepared by allowing the compound having at least two phenolic hydroxyl groups in its molecule to react with the sugar molecules each having an acetylated hydroxyl group attached to an anomeric carbon atom is represented by formula (3):



wherein R1 represents hydrogen, or C₁-C₁₀ straight or branched alkyl or alkenyl; two of R2, R3, and R4 each represent a monosaccharide residue, a disaccharide residue, or an oligosaccharide residue, these residues each optionally having a hydroxyl group that may be acetylated or having an acetyl protective group, the remaining functional group other than the two of R2, R3, and R4 representing hydroxyl.

6. The method for preparing a glycoside according to any one of Claims 1 to 5, wherein the acid catalyst is a Lewis acid catalyst.

7. The method for preparing a glycoside according to any

one of Claims 1 to 6, wherein the acid catalyst is boron trifluoride.

8. The method for preparing a glycoside according to any one of Claims 1 to 7, wherein the organic solvent is xylene.

9. The method for preparing a glycoside according to any one of Claims 1 to 8, wherein the acetic acid formed is removed from the reaction system at a temperature of 30°C to 60°C.